

CLIMATOLOGICAL DATA FOR FEBRUARY, 1911.

DISTRICT No. 3, OHIO VALLEY.

FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

The unseasonably warm weather which so largely prevailed during January continued with but one brief interruption during nearly all of the first and second decades of February, one or two days of moderately cold weather occurring about the 10th. A spell of quite cold weather prevailed from the 19th to the 24th, inclusive. No extremely low temperatures were registered, however, the lowest for the entire district being -2° . Remarkably high temperatures for February, 70° to 80° , were registered in nearly all parts of the district, these high temperatures occurring on several days and in at least two distinct periods. Precipitation was unusually frequent, but the total amount was generally below normal for the season, although ample for all needs. The amount varied from less than 2 inches in the more northerly sections to 5 inches and over in the extreme southerly sections. The distribution was good, and in agreement with the usual distribution, the larger amounts occurring where the normal is greatest and the smaller where it is least. Snowfall was generally inconsiderable over the southern half of the district, but considerable, although varying irregularly in quantity in the northern half. It remained on the ground, however, during comparatively short periods.

The month was mostly cloudy and the weather generally unsettled. Sunshine was largely deficient, there being, as a rule, less than 50 per cent of the possible amount for this season of the year. Only 26 per cent was registered at Pittsburg, Pa. High winds occurred frequently, but there was little or no damage done, except at some localities in Tennessee. Noteworthy events of the month other than those above mentioned were the thunderstorms which occurred early in the month and the severe storm, mostly sleet, which occurred about the 19th.

The mild weather was generally favorable for agricultural and other outdoor pursuits. Growing temperatures and frequent precipitation brought vegetation to an unusually advanced stage by the middle of the month, especially in the more southerly sections. In Tennessee and to the southward early plum and peach trees had bloomed, and shrubbery had budded in the more northerly sections. In this situation the freezing weather during the 20th-25th did some harm, but it is generally thought that fruit buds were not seriously damaged, and the cold spell gave a timely check to budding trees and advantageously retarded other generally too much advanced vegetation.

When the month began, an extensive area of low pressure overspread the central districts west of the Mississippi River. This depression moved eastward during the 1st, causing high southerly winds, high tempera-

tures, and fair weather generally over the district. By the morning of the 2d it was centered about Lake Erie. During the 2d an area of high pressure, attended by cloudy and decidedly colder weather, moved across the Ohio Valley, and on to the North Atlantic States by the morning of the 3d, by which time the west Middle States were again overspread by a marked area of low pressure. This new disturbance moved eastward during the 3d, the main path of center of action lying near the Ohio River, and on the morning of the 4th was centered about Lake Erie. Its passage was attended by thunderstorms and rain in all parts of the district and by heavy rains in the southern portion, when also the lowest barometer of the month was registered at most stations. It was closely followed by an area of high pressure with fair and colder weather, which had overspread the entire district by the late afternoon of the 4th. During the 5th another general barometric disturbance, which had crossed the Central Rocky Mountain section, advanced across the west Central States and by the morning of the 6th was centered in the Ohio Valley. This disturbance was attended by rain and thunderstorms in sections from Kentucky southward and by rain, sleet, and snow from the Ohio River northward and eastward. High pressure largely prevailed after the 6th until the 13th, although the weather continued unsettled and the skies mostly overcast. Also heavy sleet and snow fell over localities in the southeastern portion of the district on the 11th. During the 13th another marked disturbance moved across the west Middle States and into the Ohio Valley and Lake Region by the morning of the 14th, attended by warm, cloudy weather and rain. From the 15th to the 18th, inclusive, high pressure predominated, but the weather continued cloudy and unsettled. During the 19th a storm, which was centered in the morning in the lower Mississippi Valley, moved northeastward across Tennessee and on to the Middle Atlantic States by the morning of the 20th. This disturbance was attended by rain, heavy sleet and snow, and high winds over the Ohio River Basin, and was followed by the only real cold weather of the month. High pressure prevailed during the rest of the month, except about the 25th-26th, when a general barometric disturbance passing rapidly eastward along the northern storm path crossed the northern portion of the district, the path of the center being over the Lake Region. The highest barometer readings of the month were registered at most stations on the 28th, when there was also light rain or snow over most of the district.

TEMPERATURE.

Unusually high temperature prevailed during the greater portion of the month, and the average temperatures of the month, ranging between 5° and 10° above

normal at the various stations in the district, were about as high, and at some stations the highest, for any February of record, except February, 1909. Maximum temperatures ranging between 52° and 66° were registered in the western portions of New York, Pennsylvania, and Maryland, and between 70° and 84° in all other portions of the district. Minimum temperatures below zero were registered during the month at only two stations in the entire Ohio River Valley. These records were: Garrettsville, -2°, and New Waterford, -1°, both in Ohio, on the 21st. At two other stations only, Bolivar, N. Y., and Sagerstown, Pa., was the temperature as low as zero.

The month opened remarkably warm, the average temperature of the 1st ranging from 6° to 23° above normal in the several sections, and maximum temperatures of 60° to 70° and over were registered at many stations both north and south of the Ohio River. The temperature continued unseasonably high during nearly all of the first decade, but a change to colder came about the 9th, due to an area of high pressure with moderately cold weather moving across the district from the western plains, and on the 10th and 11th temperatures were below normal for the first time during the month. Minimum temperatures ranging between 5° and 20° were registered in sections north and east of the Ohio River and between 18° and 28° in sections south of that river. This short cold spell was followed by another remarkably warm period, continuing from about the 12th to the 18th, inclusive, when average daily temperatures again ranged between 6° and 28° above normal, and maximum temperatures ranging between 60° and 84° were registered, 84° occurring at Dover, Tenn., on the 17th. The only real cold period of the month set in about the 19th and continued until the 24th, during which time average daily temperatures were 4° to 17° below normal and minimum temperatures ranging between -2° and 20° were registered. The coldest day of the month varied between the 21st, 22d, and 23d, according to locality. During the 25th, 26th, and 27th the temperature was again above normal, but it was moderately cold on the 28th, when the average temperatures ranged from 2° to 8° below normal.

PRECIPITATION.

The total amount of precipitation for the month, a combination of rain, sleet, and snow, was below normal in all sections of the district, except over the headwaters of the Allegheny River in New York State and over a few localities in Kentucky and Tennessee. Normal precipitation for the month of February over the Ohio River Basin ranges about as follows: 4 to 6 inches over the watersheds of the Tennessee and Cumberland Rivers in Alabama, Georgia, North Carolina, and Tennessee; 3 to 4 inches in Kentucky and the upper watershed of the Ohio River and tributaries in West Virginia, Maryland, Pennsylvania, and New York; and 2.5 to 3 inches over the watersheds of the tributaries in Ohio, Indiana, and Illinois. During the month of February, 1911, the total precipitation measured from 4 to 5.5 inches over southwestern Kentucky, nearly all of Tennessee, except the extreme western and extreme eastern portions, and over all the southern border sections, except in northwestern North Carolina. It was from 2 to 4 inches over the rest of the Ohio Basin south of the Ohio River, including the extreme southwestern portion of West Virginia, over the southern portion of Illinois and Indiana, the extreme southern and northeastern portions of Ohio, and over most of western Pennsylvania and southwestern New

York. It was less than 2 inches over the central portions of Illinois and Indiana, nearly all of Ohio, and considerable of West Virginia.

Precipitation was frequent during the month, occurring in some or all sections nearly every day. The most pronounced periods when precipitation was more or less heavy and general were the 4th to 10th, 14th, and 18th to 21st. Snow or sleet, or both, fell in large amounts on the 6th, 10th, 11th, and 19th-22d, and light snow generally on the 28th. The sleet and snow storms of the 6th and of the 19th-20th were the most important precipitation events of the month, while thunderstorms which occurred so generally over the district on the 3d and 4th and daily over Kentucky and Tennessee in the entire period, 3d to 8th, were very unusual for the month of February.

The total snowfall of the month was generally inconsiderable in amount over the southern portion of West Virginia and over the sections south of the Ohio River, except in the extreme southeastern portion of Tennessee, in the vicinity of Chattanooga and bordering sections of North Carolina. In these localities from 2 to 5 inches of snow fell on the 11th during a storm which was quite limited in area. Over the sections north of the Ohio River, the northern portion of West Virginia, western Pennsylvania, and southwestern New York the total snowfall varied between 2 and 18 inches, the larger quantity as a rule occurring in the northeastern quarter of the district.

The ground was practically free of snow in all parts of the district up to the 5th, inclusive. The snowstorm of the 5th-6th covered the ground in the northern half of the district to depths ranging from about 2 to 7 inches. This covering, however, under the influence of melting temperature, rapidly disappeared, and in a week about all that remained was from 1 to 3 inches over the upper watershed of the Allegheny River, while by the 15th there was none anywhere in the district. The snow and sleet storm of the 19th-20th again covered the ground in the northern and northeastern sections to depths varying from 1 to 6 inches, but this covering had mostly disappeared by the end of the month.

MISCELLANEOUS.

Pennsylvania.—Streams maintained a good flow through the month, and no rapid changes in stages occurred. High winds were of frequent occurrence, but no serious damage was reported.

West Virginia.—Rain, warm weather, and melting snow the latter part of January caused stages in the Ohio River near or slightly above the flood line during the first day or two of the month.

Kentucky.—Thunderstorms occurred daily in some parts of the State during the period 3d-8th. There was some slight damage from lightning and high winds. Buds of peach trees and early varieties of plums and cherries were swelling and breaking out, rose bushes and other shrubbery were budding and leafing, tulips and crocuses had appeared, and grass was green by the middle of the month. The severe sleet storm of 19th-20th caused much damage throughout the State, particularly to transportation and electric trolley lines and telephone and telegraph wires. The storm was especially severe through the central and Blue Grass sections of the State. In these sections numerous towns and cities were cut off from communication for nearly 24 hours, and interurban car service was suspended. High water in the upper

Kentucky River during the month enabled lumbermen to get down great quantities of logs from the Kentucky mountains.

Indiana.—There was some damage and delay to wire and rail traffic by sleet storms of the 5th–6th and 19th–20th. The floods which were in progress in sections of the Wabash River and at a few stations on the Ohio River at the beginning of the month had subsided by the 6th. No large amount of damage was caused.

Illinois.—Considerable disturbance and delay in railroad service was caused by the snow and sleet storm of the 19th–20th, otherwise transportation and business in general were carried on without interruption. Flood stages obtained on the Wabash River at Mount Carmel from the 1st to the 6th and at Shawneetown on the Ohio River from the 6th to the 13th. No important damage resulted.

Tennessee.—Thunderstorms were numerous in the period 3d to 8th. Considerable damage resulted from lightning and high winds, which accompanied the storms of the 3d. At Selmar, Tenn., a child was killed and several persons seriously injured during one of these storms, and dozens of farmhouses were blown down. The Cumberland and Tennessee Rivers were at high stages from the 8th to the 16th, but subsided to low stages by the end of the month. The flood line was passed at a few places on the Tennessee River in Tennessee and Alabama during the high water.

ENGINEERING NOTES.

The following item is furnished by Veile, Blackwell & Buck, consulting engineers, New York, through the cour-

tesy of Mr. A. H. Horton, engineer, United States Geological Survey, Newport, Ky.:

We take pleasure in sending you herewith a statement of the hydraulic developments on New River proposed by the New River Power Co.

During the past year the New River Power Co. has made a careful study of the water supply between Fries and Radford, Va., and has done extensive surveying with the view to developing the water power there available. About 1 mile below the town of Fries, in southwestern Virginia, the New River begins a series of rapids aggregating 185 feet in 8 miles, and 25 miles farther downstream there is another series of rapids aggregating 32 feet. The property required for the development of these falls is either secured or under option. It is proposed to utilize the upper falls by a series of four dams and power houses and the lower ones by another single dam and power house. In the initial development some steam power is planned to maintain the plant capacity during low-water seasons, and no storage will be developed at present, but for use in later developments, which will be made as market conditions demand, two storage sites have been secured by options. At each of these sites it is planned to erect power houses when it may become necessary.

The capacity of the proposed development is given in the following table, which is based upon a 40 per cent load factor:

Development No.—	Drainage area (square miles).	Head (feet).	Apparatus installed (electric horse-power).
1.....	1,163	52	15,000
2.....	1,310	49	15,000
3.....	1,318	21	5,000
4.....	1,320	41	9,000
5.....	2,257	42	16,000
Total.....		205	60,000

TABLE 1.—Climatological data for February, 1911. District No. 3, Ohio Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>New York.</i>																				
Allegany.	Cattaraugus.	1,441	5	28.2	+ 6.9	51	25	8	23	27	3.61	+ 1.54	1.05	16.0	16	5	5	18	nw. sw.	Chas. E. Whitney. B. O. Newton.
Bolivar.	Allegany.	1,800	17	27.6	+ 6.9	52	25	0	23	45	3.68	+ 1.54	0.93	22.5	14	4	7	17	w.	John W. Alles.
Franklinville.	Cattaraugus.	1,598	14								3.35		0.92	15.2	14	6	3	19		
Olean.	do.		3																	
<i>Pennsylvania.</i>																				
Aleppo.	Green.	1,135	10	36.5	+ 8.2	66	14	13	22	31	1.65	- 1.11	0.40	7.0	8	9	1	18	sw.	J. S. Hinerman.
Baldwin.	Butler.	1,404	5	30.8		58	17	10	11	28	3.09		0.85	12.0	9	2	7	19	w.	S. H. Templeton.
Beaver Dam.	Beaver.	674	17																	U. S. Engineer.
Brookville.	Jefferson.	1,173	0	31.7		58	17	8	11	31*	2.92		0.44	+ 0.17						H. C. Bartholomew.
Clarion.	Clarion.	1,078	26																	J. A. Miller.
Claysville.	Washington.	1,127	7	37.0		65	14	13	22	33	2.09		0.56	13.5	10					E. T. Buchanan.
Confluence.	Somerset.	1,352	27																	Grant Pyle.
Franklin.	Venango.	955	37	29.8	+ 6.4	59	18	8	21	28	2.95	- 0.33	0.64	8.0	13	2	5	21	w.	F. E. Dixon.
Freeport.	Armstrong.	772	38																	Mrs. Anna R. Burenre
Greensburg.	Green.	768	22																	James G. Kramer.
Greenville.	Mercer.	950	15	31.6	+ 6.3	61	17	5	11	34	2.17	- 0.49	0.53	10.0	9	7	4	17	nw.	A. M. Orr.
Indiana.	Indiana.	1,350	44	33.2	+ 4.7	60	17	10	11	30	2.51	- 0.47	0.53	7.7	8	9	4	15	s.	R. W. Wehrle.
Johnstown.	Cambria.	1,184	23	33.4	+ 4.6	63	17	16	22	28	2.92	- 0.99	0.74	13.2	13	2	11	15	sw.	E. C. Lorentz.
Lock No. 4.	Washington.	718	25																	R. T. McGowan.
Lycippus.	Westmoreland.	1,420	19	34.4	+ 7.8	60	18	13	22	28	2.34	- 0.54	0.58	8.4	11					Murray Forbes.
Pittsburg.	Allegheny.	842	41	35.3	+ 3.5	64	17	14	21	33	1.98	- 0.68	0.56	8.6	13	4	8	16	nw.	U. S. Weather Bureau.
Saugerstown.	Crawford.	1,116	20	30.8	+ 8.1	60	17	7	11	30		- 0.27	0.86	7.5	16	5	3	16	sw.	J. G. Apple.
Skidmore.	Lawrence.	1,000	7	31.5		60	17													W. H. Stoner.
Somerset.	Somerset.	2,250	55	29.0	+ 2.5	58	17	10	11†	31	3.48	- 0.77	0.80	16.1	10	0	12	16	nw.	W. M. Schrock.
Uniontown.	Fayette.	999	23	36.2	+ 5.1	66	14	16	23	29	3.04	- 0.42	0.52	8.5	12	7	2	19	nw.	Wm. Hunt.
Warren.	Warren.	1,137	22	28.5	+ 5.8	53	17	5	23	29	3.76	+ 1.13	0.90	14.1	11	5	0	23	nw.	Anna Simpson.
<i>Maryland.</i>																				
Deer Park.	Garrett.		17	30.6	+ 5.4	57	17†	8	22	32	1.75	- 1.46	0.35	12.0	10					S. P. Specht.
Grantsville.	do.		17	31.0	+ 6.2	64	2	10	19	34	2.40	- 1.98	0.40	14.0	8	4	5	19	w.	J. S. Miller.
Oakland.	do.		11	31.9	+ 5.7	58	17	9	22	31	1.75		0.30	9.8	13	3	11	14	w.	R. E. Weber.
<i>West Virginia.</i>																				
Bancroft.	Putnam.	574	9	40.0		75	14	15	22	46	3.11		1.07	0.5	11	9	3	16	sw.	James Hill.
Beckley.	Raleigh.	2,440	12	41.31		66	2	16	11	37†										John A. Ewart.
Bens Run.	Pleasants.	622	10	39.0	+ 8.6	68	14	17	22	28	2.69	- 1.21	0.69	7.0	10	18	2	8		J. D. Riggs.
Bluefield.	Mercer.	2,563	17	40.4	+ 7.8	71	3	11	22	40	2.52	- 0.87	0.91	T.	5	7	18	3		Norfolk & Western Ry.
Buckhannon.	Upshur.	1,472	20	38.8	+ 8.0	68	14	14	11†	32	1.98	- 1.90	0.54	5.0	9	9	9	10	w.	H. A. Darnall.
Cairo.	Ritchie.	667	10	42.44	+ 8.5	70	15	13	11	32†	0.86	- 1.82	0.20	2.5	7	0	18	10	w.	Van A. Zevely.
Central Station.	Doddridge.	900	11	37.0	+ 7.1	70	14	10	11	37	2.22	- 2.03	0.50	3.8	11	2	15	11	w.	G. W. Sherwood.
Charleston.	Kanawha.	598	24	44.4		75	14†	19	22	36	2.51	- 1.14		T.	8	15	4	9	w.	R. C. Hewes.
Creston.	Wirt.	612	11	40.2	+ 9.2	72	14	12	22	33	2.00	- 0.68	0.57	2.5	10	8	8	12	w.	J. M. Reed.
Cuba.	Jackson.	544	9	39.6		73	14	6	23	35	2.12	- 0.81	0.70	3.5	9	3	17	8	nw.	C. T. Perry.
Elkhorn.	McDowell.	1,933	19	42.2	+ 7.1	67	1	14	22	35	2.30	- 0.85	0.51	T.	9	6	11	11	sw.	J. J. Lincoln.
Elkins.	Randolph.	1,940	11	36.8	+ 5.5	66	14	13	11	36	2.18	- 0.99	0.42	12.2	14	3	9	16	w.	U. S. Weather Bureau.
Fairmont.	Marietta.	879	18	38.9		71	14	6	11	41	1.91	- 1.17	0.54	5.6	12					H. Glenn Fleming.
Glenville.	Gilmer.	738	22	41.2	+ 9.9	72	14	16	11	31	1.83	- 2.14	0.63	2.5	7	7	8	13	w.	John Holt.
Grafton.	Taylor.	985	18	40.2	+ 9.8	70	14	14	11	36	2.58	- 0.63	1.61	7.5	10	11	8	9		Arthur George.
Green Sulphur Springs.	Summers.	1,600	16	39.2	+ 7.7	69	17	16	22	36	1.86	- 0.70	0.55	0.4	8	7	9	12	w.	J. B. Lavender, C. E. E.
Hinton.	do.	1,400	21	40.6	+ 6.6	71	13†	16	22	43	2.52	- 0.65	0.72	5.0	10	7	7	14	sw.	L. H. Hutchinson
Huntington.	Cabell.	510	17	40.0	+ 8.4	72	14	19	21†	37	3.92	+ 0.73	1.38	0.6	9	8	3	17	w.	Geo. T. Argabrite.
Lewisburg.	Greenbrier.	2,200	11	38.8	+ 8.2	68	15	13	22	36	2.05	- 0.98	0.46	1.0	7	18	5	5	w.	H. C. Ragland.
Logan.	Logan.	665	10	46.3	+ 6.7	76	17	19	22	41	3.11	- 1.21	0.96	T.	8	6	19	3	w.	Allen Smith.
Lost Creek.	Harrison.	1,033	15	37.8	+ 7.4	70	14	11	22	36	1.09	- 2.20	0.29	4.8	9	4	6	18	w.	S. E. Bradley.
Madison.	Boone.	704	8																	Jas. A. Morgan.
Mannington.	Marion.	967	9	34.2		68	14	8	22	47	2.24	- 0.49	1.28	2.0	11	6	1	21	w.	C. J. McCarty.
Marlinton.	Pocahontas.	2,169	17	34.0	+ 5.1	60	17	11	22	38	1.23	- 1.36	0.83	1.1	8	13	8	7		Horace Atwood.
Morgantown.	Monongahela.	1,250	36	38.4	+ 7.9	67	14	16	22	35	1.37	- 2.00	0.49	2.0	6	8	7	13	w.	M. L. Brown.
Moundsville.	Marshall.	640	10	38.8	+ 6.9	68	14	16	11	30	1.40	- 1.00	0.32	4.0	7	8	2	18	nw.	Frank S. Evans.
New Cumberland.	Hancock.	987	14	35.2	+ 8.4	62	14†	11	21	30	1.62	- 1.19	0.40	9.0	6	5	2	21	w.	Wm. Ankron.
New Martinsville.	Wetzel.	634	18	40.4	+ 8.8	69	14	18	22	38	2.01	- 2.54	0.30	T.	3	17	3	7	nw.	Miss Donna Tully.
Nuttallburg.	Fayette.	2,252	18	38.6	+ 6.9	66	17	12	22	38	0.50									U. S. Weather Bureau.
Parkersburg.	Wood.	638	23	39.2	+ 5.4	72	14	18	21	28	1.65	- 1.39	0.50	6.4	11	6	7	15	sw.	J. W. Swisher.
Parsons.	Tucker.	1,662	12	36.6	+ 8.1	65	14	10	11	38	2.45	- 1.00	0.50	8.0	8	7	11	10	w.	J. D. Dadisman.
Philipps.	Barbour.	1,192	18	39.5	+ 8.8	71	14	14	11	37	2.15	- 1.30	0.55	6.0	10	9	10	9	w.	Dr. J. L. Cunningham.
Pickens.	Randolph.	2,785	20	36.7	+ 4.7	65	1†	9	22	39	2.73	- 1.99	0.50	18.0	10	9	5	14	w.	W. V. Senter.
Pineville.	Wyoming.		2																	W. D. Holmes.
Point Pleasant.	Mason.	553	21	41.2	+ 8.3	74	14	18	21†	34	3.21	- 0.49	1.28	2.0	11	6	1	21	se.	Morris Hansford.
Powellton.	Fayette.	904	15	41.6	+ 7.2	72	17	21	21†	37	1.79	- 1.36	0.83	1.1	8	13	8	7	w.	H. Scott.
Princeton.	Mercer.	2,469	10	36.2	+ 4.0	61	17	11	22	34	2.90	- 1.58	0.61	2.0	9	7	12	9	w.	E. P. Turley.
Robertsburg.	Putnam.	574	2	39.2		73	14	16	23	41	3.24		1.12	1.0	9</					

TABLE 1.—Climatological data for February, 1911. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.			Lowest.			Total.	Departure from the normal.	Greatest in 24 hours.			Number of rainy days, 0.01 inch or more.			
						Date.			Date.					Greatest in 24 hours.	Total snowfall, unmeted.	Number of clear days.	Total snowfall, unmeted.	Number of partly cloudy days.	Number of cloudy days.	
Ohio—Continued.																				
Coshocton.	Coshocton.	770	2	36.8	+ 6.8	70	17	12	21	27*	1.57	- 1.19	0.50	6.4	8	4	14	10	sw.	
Dayton.	Montgomery.	790	30	40.4	+ 9.1	68	17	8	21	26	1.55	- 0.48	0.39	5.6	8	5	8	15	sw.	
Delaware.	Delaware.	927	14	34.4	+ 7.6	62	14†	12	22	33	1.85	- 1.00	0.42	4.9	12	4	12	12	sw.	
Demos.	Tuscarawas.	1,325	23	35.8	+ 9.2	65	14†	12	22	36	2.06	- 0.49	0.78	8	6	15	7	s.		
Dennison §.	Ross.	846	1	37.2	-	65	14†	12	21	32	1.50	- 1.29	0.60	5.5	5	10	3	w.		
Frankfort.	Portage.	750	19	31.5	+ 9.5	70	14	14	21	32	1.50	- 0.72	0.56	8.0	12	6	5	17	w.	
Garretttsville.	Granville.	1,005	27	31.5	+ 7.5	61	17	—	21	34	2.29	- 0.72	0.60	8.3	8	5	6	7	w.	
Gratiot §.	Licking.	980	29	35.4	+ 7.8	65	14†	13	21†	27	1.73	- 1.27	0.60	5.5	9	2	12	14	w.	
Green.	Butler.	1,000	22	36.0	+ 7.7	65	17	11	22	36	2.01	- 1.07	0.60	5.5	5	11	9	8	e.	
Green Hill.	Harrison.	500	18	40.4	+ 9.2	72	14	18	22	42	2.69	- 0.68	1.20	5.0	5	11	9	8	sw.	
Greenville.	Columbiana.	1,135	18	32.1	+ 8.6	62	17	3	21	33	2.34	+ 0.02	0.81	10.3	8	6	14	11	w.	
Hillsboro.	Darke.	1,060	25	34.7	+ 7.2	68	17	13	10†	25	1.50	- 1.10	0.38	4.0	7	4	13	11	sw.	
Ironton.	Highland.	1,063	32	37.6	+ 8.8	67	14	12	21	28	2.28	- 0.04	0.81	7.3	8	5	9	14	sw.	
Jacksonburg.	Lawrence.	575	28	42.5	+ 8.8	76	14	16	23	35	3.65	+ 0.01	1.40	—	10	8	11	9	sw.	
Kenton.	Butler.	975	43	36.0	+ 6.7	68	17	10	21	28	1.55	- 1.70	0.52	6.0	5	11	10	7	sw.	
Killbuck.	Hardin.	1,015	19	32.1	+ 4.7	64	17	4	21	30	1.26	- 1.72	0.69	3.0	4	6	6	16	w.	
Lancaster.	Holmes.	1,087	19	34.4	+ 9.4	65	17	12	1†	30	1.91	- 0.56	0.80	8.4	9	4	16	8	se.	
McConnelsville.	Fairfield.	898	16	37.8	+ 9.6	68	14†	16	22	28	1.60	- 1.07	0.50	5.0	8	6	5	17	sw.	
Marietta.	Morgan.	710	27	37.8	+ 7.5	69	14	15	22	30	1.72	- 1.28	0.49	3.5	9	4	8	16	s.	
Marion.	Washington.	627	91	39.6	+ 5.8	70	14	16	22	28	1.65	- 1.03	0.51	3.6	9	4	8	16	sw.	
Millfordton.	Marion.	980	33	34.8	+ 8.7	65	17†	11	21	32	2.09	- 0.24	0.84	12.0	8	5	9	14	sw.	
Millington §.	Knox.	1,200	19	33.6	+ 9.8	64	17	6	23	28	1.63	- 0.67	0.52	10.0	4	7	4	17	sw.	
Perry.	Perry.	875	18	36.7	+ 9.1	68	14	12	22	30	1.77	- 0.84	0.44	4.0	7	6	13	9	sw.	
Millport.	Columbiana.	1,145	18	32.5	+ 8.3	61	17	5	11	33	2.18	- 0.26	0.60	10.0	9	3	8	17	nw.	
Nellie.	Coshocton.	850	11	35.4	+ 9.1	66	17	10	22	29	1.65	- 0.55	0.70	7.5	3	10	14	4	w.	
New Alexandria.	Jefferson.	1,050	26	36.4	+ 7.7	63	14	11	21	31	1.90	- 1.16	0.50	14.0	4	6	8	14	n.	
New Berlin.	Stark.	1,100	18	31.4	+ 7.5	61	17	8	11†	34	2.89	+ 1.08	0.75	10.0	8	6	1	21	w.	
New Waterford.	Columbiana.	1,053	16	32.3	+ 8.5	60	17†	—	21	32	1.71	- 0.67	0.52	10.0	4	7	4	14	sw.	
Ohio State University.	Franklin.	757	28	35.6	+ 7.3	67	17	11	21	28	1.36	- 1.59	0.38	6.7	8	3	10	15	nw.	
Pataksala.	Licking.	1,015	19	35.1	+ 8.8	65	17	12	21†	28	1.47	- 1.30	0.42	7.2	10	1	15	12	w.	
Peebles.	Adams.	645	1	36.4	-	72	14	5	21	33	2.43	-	1.50	3.0	7	12	6	10	nw.	
Philo (1).	Muskingum.	1,018	16	36.6	+ 7.8	66	17	14	22	26	1.13	- 1.09	0.33	5.1	7	5	8	15	nw.	
Piqua.	Miami.	847	1	—	—	—	—	—	—	—	—	—	0.35	6.5	8	12	5	11	sw.	
Plattsburg.	Clarke.	1,130	18	34.8	+ 8.8	66	17	12	21†	30	1.44	- 1.22	0.60	5.5	6	6	10	12	w.	
Portsmouth.	Scioto.	327	80	39.8	+ 2.8	71	14	18	21†	33	3.14	- 0.05	1.26	2.0	10	8	1	19	w.	
Prospect.	Marion.	909	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Rittman.	Wayne.	990	19	33.5	+ 9.7	61	17	7	22	28	2.72	+ 0.26	1.00	11.0	5	5	8	15	s.	
Shenandoah.	Richland.	1,100	19	31.2	+ 8.1	61	17	10	11	34	2.32	+ 0.22	1.22	12.0	7	1	16	11	sw.	
Sidney.	Shelby.	985	28	35.2	+ 9.0	67	17	12	21	26	1.41	- 1.43	0.36	4.2	8	6	6	16	nw.	
Somerset.	Perry.	1,080	12	34.4	+ 6.4	66	17	13	22	39	1.43	- 0.34	0.60	9.0	6	7	6	15	s.	
Springfield.	Clarke.	980	17	—	—	—	—	—	—	—	—	—	0.42	—	8	5	16	7	sw.	
Summerfield.	Noble.	1,187	3	37.0	-	66	14†	15	11†	32	1.71	- 0.40	4.8	8	3	14	11	sw.		
Syracuse.	Meigs.	583	1	40.6	-	75	14	17	21†	32	2.09	- 0.95	3.0	7	6	8	14	w.		
Thurman.	Gallia.	696	18	40.0	+ 8.8	74	14	15	21†	32	1.35	- 1.44	0.60	1.0	4	5	8	15	sw.	
Urbana.	Champaign.	1,031	43	35.0	+ 9.9	67	17	7	21	32	1.40	- 0.90	0.70	9.5	5	3	13	12	sw.	
Warren.	Trumbull.	900	22	32.4	+ 7.2	62	17	10	21	28	2.80	- 0.23	0.73	13.7	10	5	4	19	s.	
Waverly.	Pike.	590	28	39.8	+ 7.5	73	14	12	22	33	1.52	- 0.04	0.82	7.7	5	11	6	11	s.	
Waynesville.	Warren.	700	26	36.0	+ 9.4	68	17	12	21	33	1.04	- 1.90	0.38	—	6	12	10	sw.		
Wooster.	Wayne.	1,030	32	33.8	+ 8.0	62	17	9	11	40	2.25	- 0.64	0.60	11.0	7	1	7	20	sw.	
Youngstown.	Mahoning.	846	18	—	—	—	—	—	—	—	—	—	0.78	0.80	19.0	12	0	13	w.	
Zanesville.	Muskingum.	700	24	—	—	—	—	—	—	—	—	—	1.64	- 0.94	0.40	5.2	11	5	w.	
Virginia.																				
Big Stone Gap.	Wise.	1,540	20	44.6	+ 9.2	73	3	15	22	37	4.69	+ 0.15	2.20	T.	8	10	1	17	w.	
Blacksburg.	Montgomery.	2,170	20	38.7	+ 6.8	68	2	14	22	42	1.84	- 1.36	0.65	0.4	8	7	10	11	w.	
Burke's Garden.	Tazewell.	3,250	16	38.0	+ 8.4	62	2	7	22	33	2.88	- 0.82	1.35	2.0	5	9	3	16	w.	
Elk Knob.	Lee.	3,243	8	42.5	-	66	17†	12	22	33	4.12	- 1.99	T.	11	8	6	14	sw.		
Galax.	Grayson.	2,300	1	40.4	-	77	17	15	22	33	1.16	- 0.80	0.80	T.	3	9	6	13	nw.	
Ivanhoe.	Wythe.	2,028	7	38.8	-	62	2†	16	22	28	1.74	- 0.43	1.0	9	10	13	5	w.		
Lebanon.	Russell.	2,181	1	43.0	-	70	2	12	22	33	2.32	- 0.21	1.03	T.	7	12	4	12	sw.	
Marion.	Smyth.	2,224	16	42.4	+ 6.8	68	2†	13	22	33	3.23	- 0.21	1.03	T.	10	6	13	9	s.	
Max Meadows.	Wythe.	2,028	15	40.0	+ 8.2	66	2	16	22	31	3.76	- 1.23	0.77	T.	3	12	9	7	w.	
Mendoza.	Washington.	1,350	2	—	—	—	—	—	—	—	—	—	1.14	T.	9	12	1	11	sw.	
Spears Ferry.	Scott.	1,221	15	—	—	—	—	—	—	—	—	—	3.99	+ 0.77	1.56	T.	8	9	13	w.
Wytheville.	Wythe.	2,293	18	39.5	+ 4.4	66	2	14	22	31	2.04	- 2.05	0.78	7	8	9	6	13	w.	
North Carolina.																				
Altapass§.	Mitchell.	2,629	—	—	—	—	—	—	—	—	—	—	0.45	2.0	8	15	3	10	se.	
Andrews.	Cherokee.																			

TABLE 1.—Climatological data for February, 1911. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of partly cloudy days.	Number of cloudy days.			
Tennessee—Continued.																				
Bluff City.	Sullivan.	14	18	45.9	+ 8.3	75	1	16	22	34	3.20	- 0.27	0.94	T.	8	6	4	18	J. W. Fisher.	
Byrdstown.	Pickett.	1,026	27	47.8	+ 7.5	82	14	18	22	37	3.42	- 1.10	1.10	T.	8	6	7	15	John Lacy.	
Carthage.	Smith.	500	11	45.5	+ 8.6	79	16	15	22	35	4.52	- 0.11	1.80	0.0	7	10	2	16	E. C. Pickering.	
Cedar Hill.	Robertson.	625	8	45.5	+ 8.6	79	16	15	22	35	3.65	- 0.51	1.50	T.	8	12	7	9	J. F. Ruffin.	
Celina.	Clay.	494	23	45.5	+ 8.6	79	16	17	22	35	4.55	- 0.51	1.55	0.0	7	10	2	16	S. B. Anderson.	
Center Point.	Chester.	14	14	45.5	+ 8.6	79	16	14	22	35	3.63	- 0.13	0.85	1.8	7	10	3	15	H. H. Bailey.	
Charleston.	Bradley.	14	14	45.5	+ 8.6	79	16	16	22	35	4.17	- 1.18	1.30	0.0	12	7	4	17	J. T. Weeks.	
Chattanooga.	Hamilton.	808	32	49.2	+ 5.5	75	18	20	22	31	4.41	- 0.53	1.35	5.1	17	5	8	15	U. S. Weather Bureau.	
Clarksville.	Montgomery.	520	48	46.4	+ 6.1	79	16	17	22	35	2.72	- 1.57	1.22	T.	10	13	5	10	Prof. James A. Lyon.	
Clinton.	Anderson.	23	15	45.5	+ 8.6	79	16	18	22	35	5.38	- 0.20	1.65	T.	11	8	0	20	John Thompson.	
Dandridge.	Jefferson.	7	23	45.5	+ 8.6	79	16	14	22	35	3.92	- 0.20	0.0	T.	8	8	2	18	J. E. Swann.	
Decatur.	Meigs.	850	15	47.2	+ 7.6	75	2	16	22	42	4.24	- 1.45	1.33	T.	14	9	10	9	J. W. Lillard.	
Dickson.	Dickson.	800	16	45.9	+ 8.8	78	15†	14	22	37	3.79	- 0.69	1.06	0.0	10	11	5	13	A. R. Sugg.	
Dover.	Stewart.	726	2	48.8	+ 8.8	77	15	19	22	35	4.25	- 0.25	1.33	T.	5	11	5	12	A. M. Tippit.	
Dunlap.	Sequatchee.	2	14	45.6	+ 7.2	84	17	17	22	42	4.45	- 0.73	1.39	0.0	9	6	12	10	S. B. Boyd.	
Elizabethhton.	Carter.	1,575	21	43.4	+ 7.5	74	15	11	24	46	4.07	- 0.73	1.56	0.1	11	12	6	10	Mrs. E. D. Ashley.	
Erasmus.	Cumberland.	1,850	14	47.4	+ 6.8	71	14†	18	22	35	5.91	+ 1.21	2.40	T.	11	12	7	9	Erastus P. Bell.	
Florence.	Rutherford.	560	29	47.4	+ 6.8	71	14†	18	22	37	5.67	+ 1.20	1.91	T.	7	9	2	17	J. F. Hyde.	
Franklin.	Williamson.	655	21	46.0	+ 6.6	75	18	18	22	37	4.37	- 0.73	1.75	T.	8	11	2	15	Ed. F. Wright.	
Halls Hill.	Rutherford.	9	23	45.5	+ 8.6	79	17	14	22	35	4.18	- 0.73	1.86	T.	11	9	2	20	Robert R. Ayers.	
Harriman.	Roane.	841	16	47.4	+ 9.4	76	16	18	22	37	4.62	- 0.13	1.90	T.	6	5	15	8	John Lutzelman.	
Hohenwald.	Lewis.	983	25	48.0	+ 8.6	79	16	15	22	39	5.11	+ 0.02	1.84	T.	9	8	12	8	Capt. H. P. Seavy.	
Iron City.	Lawrence.	14	14	49.4	+ 9.1	79	17	14	22	41	5.69	+ 0.73	1.86	T.	11	9	2	20	C. Calvin Maddox.	
Jefferson City.	Jefferson.	7	14	45.5	+ 8.6	79	16	14	22	35	4.31	- 0.20	2.15	T.	9	9	1	12	Ward Crosby.	
Johnson City.	Washington.	1,740	16	43.6	+ 5.6	72	1	18	21†	34	3.14	- 0.46	0.69	2.0	10	11	5	12	Miss Sallie B. Matthews.	
Johnsonville.	Humphreys.	364	15	47.8	+ 8.9	79	17	17	22	41	2.76	- 1.62	0.78	T.	11	10	2	16	H. Crumbiss.	
Kingston.	Roane.	20	15	45.5	+ 8.6	79	17	14	22	35	4.13	- 1.36	1.00	0.0	10	7	0	21	Logan Fields.	
Knoxville.	Knox.	977	40	47.2	+ 6.4	70	2	19	22	34	4.83	- 0.07	2.26	T.	14	6	10	12	U. S. Weather Bureau.	
Lebanon.	Wilson.	522	2	48.2	+ 7.2	76	14†	16	22	35	4.59	- 0.73	1.85	T.	10	9	6	13	Dr. R. D. Crutcher.	
Lewisburg.	Marshall.	727	16	48.0	+ 7.7	78	15	17	22	39	5.45	+ 0.59	1.63	0.5	12	8	9	11	Livingston Academy.	
Livingston.	Overton.	1	23	47.2	+ 7.2	77	1	16	22	33	3.53	- 0.34	1.34	T.	7	18	0	10	Robert W. Clark.	
Loudon.	Loudon.	816	8	45.5	+ 8.6	79	17	14	22	35	4.18	- 1.44	1.9	T.	9	8	4	14	Col. J. H. Burrow.	
Lynville.	Giles.	770	23	49.3	+ 9.1	74	18†	19	22	33	6.09	+ 0.76	2.05	T.	11	4	15	9	Alice L. Hendrick.	
McGhee.	Monroe.	7	14	45.5	+ 8.6	79	17	14	22	35	4.35	- 1.20	1.20	T.	9	7	0	21	Miss Carrie Cash.	
McMinnville.	Warren.	1,011	27	48.2	+ 7.0	75	15†	15	22	42	3.60	- 0.51	1.29	0.9	11	7	12	9	J. T. Sparkman.	
Maryville.	Blount.	1,050	15	50.0	+ 10.1	73	13	20	22	33	4.24	- 0.66	1.85	T.	7	9	12	7	Mrs. F. E. Benedict.	
Mountain City.	Johnson.	2,486	14	42.0	+ 9.0	71	16	13	22	43	2.64	- 1.28	1.21	T.	5	10	3	15	E. E. Barry.	
Nashville.	Davidson.	654	40	46.6	+ 5.6	74	15	17	22	31	4.68	+ 0.36	1.60	0.0	11	9	8	10	U. S. Weather Bureau.	
Newport.	Cocke.	1,280	21	46.3	+ 6.6	71	18	20	22	32	3.69	- 0.43	1.10	0.0	6	8	3	12	Dr. C. T. Burnett.	
New River.	Scott.	1,215	4	45.5	+ 8.6	79	17	14	22	35	3.99	- 0.20	1.20	0.1	12	8	9	11	Burl W. Buttram.	
Palmetto.	Bedford.	770	18	48.0	+ 8.1	76	15	16	22	35	4.31	- 0.12	1.25	T.	12	8	9	11	Mrs. Ross Woods.	
Pinewood.	Hickman.	4	47.9	81	15	12	22	47	45	4.50	- 0.32	1.08	T.	11	8	10	10	Miss Bessie Howard.		
Pope.	Perry.	14	49.4	+ 10.2	81	15	14	22	48	3.64	- 0.32	1.04	0.0	12	10	4	12	Fred Beal.		
Rogersville.	Hawkins.	1,150	26	45.4	+ 6.8	72	1	19	22	44	3.66	- 0.75	1.14	T.	9	8	7	13	S. G. Wilson.	
Rugby.	Morgan.	1,410	23	44.0	+ 7.2	74	15	12	22	44	4.35	- 0.92	1.48	T.	9	8	7	13	W. F. Bell.	
Savannah.	Hardin.	442	27	50.4	+ 8.5	76	15†	22	24	43	4.63	+ 0.34	1.45	T.	10	6	1	21	H. O. Eckel.	
Sevierville.	Sevier.	5	14	46.0	+ 8.5	71	1	18	22	38	4.22	- 0.38	1.82	T.	10	1	6	21	A. H. Noll.	
Sewanee.	Franklin.	2,000	15	48.0	+ 9.8	71	16	11	23	36	4.26	- 1.09	1.30	1.5	7	11	1	16	E. H. Hull.	
Sparta.	White.	920	5	47.1	+ 7.8	78	1	16	22	42	3.26	- 0.32	1.83	T.	6	9	10	9	Miss Carrie Cash.	
Springdale.	Claiborne.	1,058	20	46.0	+ 7.2	70	23	11	22	39	3.01	- 2.02	2.20	T.	7	8	8	12	Miss Bessie Howard.	
Tazewell.	Henry.	377	8	45.6	+ 7.2	78	16	16	22	40	3.02	- 0.55	0.98	T.	7	9	3	15	W. F. Randle.	
Tullahoma.	Coffee.	1,075	23	48.0	+ 8.3	73	15	15	22	39	5.06	+ 0.43	1.77	T.	12	6	14	8	W. J. Piggott.	
Walling.	White.	909	8	45.5	+ 7.2	77	15	15	22	40	5.69	- 0.19	2.20	0.0	9	9	3	16	H. A. Boden.	
Waynesboro.	Wayne.	753	25	48.4	+ 7.7	77	15	15	22	40	5.22	+ 0.54	1.47	1.0	13	5	15	J. C. Carr.		
Wildersville.	Henderson.	13	46.0	+ 8.8	81	15	18	22	39d	3.64	- 0.19	0.82	0.0	8	8	5	16	R. T. Moore.		
Worsham.	Sumner.	10	14	45.5	+ 8.6	79	18	15	21	33	2.85	- 0.29	0.82	T.	8	7	5	16	J. K. Roberts.	
Yukon.	Lincoln.	850	14	47.1	+ 7.0	71	18	15	21	33	4.56	- 0.29	1.77	0.5	9	7	12	9	H. C. Boyd.	
Kentucky.																				
Alpha.	Clinton.	17	46.6	+ 9.0	74	1	18	23	31	5.17	+ 1.06	1.53	T.	6	13	4	11	W. W. Hicks.		
Anchorage.	Jefferson.	700	10	39.3	+ 7.1	72	10†	16	22	36	2.00	- 1.23	0.62	0.5	7	11	7	10	C. E. Barrett.	
Bardstown.	Nelson.	637	14	42.8	+ 8.3	74	15†	12	22	41	4.71	+ 0.55	2.10	9	10	0	18	G. M. Talbott.	
Beattyville.	Lee.	650	7	41.1	+ 7.5	75	14†	14	22	46	4.56	- 0.66	1.58	1.0	11	9	3	16	G. W. Cann.	
Beaver Dam.	Ohio.	441	29	42.2	+ 7.8	78	16	18	22	42	2.14	- 0.25	1.00	T.	5	8	0	20	T. S. Woodward.	
Berea.	Madison.	1,070	10	42.6	+ 7.7	73	14	15	22	36	2.06	- 1.49	1.12	0.4	8	14	4	10	C. F. Rumold.	
Bowling Green.	Warren.	500	22	43.6	+ 6.4	77	16	16	22	44	3.41	- 0.74	0.93	0.9	8	9	2	17	Mrs. L. G. Causey.	
Burnside.	Pulaski.	773	20	45.4	+ 7.6	75	16	15	23	49	3.52	- 0.64	1.36	1.0	10	6	7	15	G. M. Estes.	
Cadiz.	Pendleton.	668	5	41.4	+ 6.7	75	16	15	23	49	3.52	- 0.50	1.20	0.61	T.	5	12	1	15	F. T. Street.
Frankfort.	Rowan.	560	20	40.0	+ 5.4	71	1	19	20†	32	1.90	- 1.69	0.61	T.	10	11	2	15	W. A. Taylor.	
Franklin.	Franklin.	560	14	40.0	+ 5.4	75	16	15	23	49	3.52	- 0.50	1.20	0.61	T.	10	11	2	15	Mrs. Mertlin M. Bruns.
Greenbush.	Simpson.	691	17	45.3	+ 6.7	76	15	16	22	36	4.61	- 0.57	1.77	T.	5	7	13	8	J. B. Atkinson.	
High Bridge.	Green.	581	19	41.8	+ 8.5	76	1	15	22	37	4.08	- 0.05	1.57	T.	8	11	0	12	J. B. Alcorn.	
Jessamine.	Loretto.	762	8	45.5	+ 8.1	80	16	17	22	35	3.65	- 0.50	1.20	0.9	12	7	12	4	14	Miss LuLu Wood.
Breckenridge.	Grayson.	13	42.2	+ 9.9	72	16	17	22	32	2.79	+ 0.42									

TABLE 1.—Climatological data for February, 1911. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days 0.01 inch or more.	
Kentucky—Continued.																
Shelby City.	Boyle.	1,087	17	41.4	+ 9.0	73	14	12	23	40	3.74	+ 0.44	0.88	T.	11	s.
Shelbyville [§] .	Shelby.	759	22	41.1	+ 7.1	71	1	15	23	40	2.70	- 0.90	0.85	T.	7	sw.
Taylorville.	Spencer.	489	9	42.0		70	1†	15	21	33	2.84		1.11	0.5	9	sw.
Williamsburg [§] .	Whitley.	939	15	42.8	+ 5.5	73	14†	11	22	43	4.36	+ 0.80	1.53	T.	9	w.
Williamstown [§] .	Grant.	943	9	37.5		69	17	14	21†	40	1.76		0.65	T.	6	17
<i>Indiana.</i>																
Anderson.	Madison.	892	16	36.0	+ 8.9	69	17	11	21†	30	1.13	- 1.07	0.35	2.7	7	sw.
Attica.	Fountain.	522	1								1.80		0.52	5.5	13	
Bloomington.	Monroe.	744	16	35.6	+ 6.1	70	17	13	21†	37	2.71	- 1.11	0.75	7.0	9	sw.
Bluffton.	Wells.	835	16	32.5	+ 7.7	65	17	9	21†	33	2.12	- 1.00	0.44	2.5	9	w.
Butlerville.	Jennings.	767	26	38.4	+ 7.1	70	17	10	21	32	2.34	- 1.43	0.68	7.1	9	nw.
Cambridge City.	Wayne.	941	20	35.0	+ 8.9	69	17	7	21	35	1.39	- 1.37	0.45	4.0	8	sw.
Columbus.	Bartholomew.	632	28	37.2	+ 7.1	72	17	6	21	32	1.62	- 1.53	0.46	5.5	10	charles Lemberger.
Connersville.	Fayette.	769	29	37.9	+ 8.9	70	17	10	21	36	1.19	- 2.00	0.40	2.4	5	John A. Perry
Crawfordsville.	Montgomery.	780	1	35.9		69	17	11	10	33	0.87		0.50	3.2	3	H. T. Swindler.
Delphi.	Carroll.	668	26	33.3	+ 7.6	64	17	10	21†	38	1.71	- 0.73	0.47	6.0	7	P. H. Burns.
Eminence.	Morgan.	782	5	36.2		70	17	10	21	36	1.29		0.40	3.0	6	L. A. Higginbotham.
Evansville.	Vanderburg.	336	35	41.3	+ 5.5	74	16	19	21	33	1.84	- 1.22	0.75	1.0	9	E. E. Kelso, M. D.
Farmersburg.	Sullivan.	13	38.0	+ 9.5	73	17	15	21†	36	1.57	- 1.02	0.45	4.0	5	U. S. Weather Bureau	
Farmland.	Randolph.	1,101	29	35.0	+ 6.7	67	17	12	21	26	1.42	- 1.48	0.60	3.5	13	Maurice Yeager.
Greenfield.	Hancock.	905	8	37.5		68	17	12	21	33	1.01		0.41	2.5	6	W. J. Davison.
Greensburg.	Decatur.	954	15													Prof. W. C. Goble.
Huntingburg.	Dubois.	462	3								2.20					Chas. H. Ewing.
Huntington.	Huntington.	741	18	32.9	+ 8.5	62	17	10	21†	29	1.68	- 0.82	0.68	7.8	6	H. Dufendach.
Indianapolis.	Marion.	822	40	36.3	+ 5.6	69	17	13	10	30	1.28	- 1.80	0.40	3.0	10	Chas. McGrew.
Jeffersonville.	Clark.	455	29	42.0	+ 7.2	72	17	19	21†	32	2.60	- 1.30	1.03	T.	9	U. S. Weather Bureau.
Judyville.	Warren.	4	33.2 ^a			65	17	6	10	34 ^a	1.36		0.40	4.3	7	John C. Loomis.
Kokomo.	Howard.	840	19	33.4	+ 7.9	64	17	7	21	32	1.36	- 0.72	0.45	5.0	5	Dale R. Warrick.
Lafayette.	Tippecanoe.	617	32	33.4	+ 6.4	65	17	10	21	34	1.94	- 0.85	0.58	6.0	8	P. H. Robertson.
Logansport.	Cass.	620	31	33.6	+ 7.3	63	17	9	21†	39	1.63	- 1.04	0.66	6.2	6	Win. J. Jones, Jr.
Madison.	Jefferson.	460	19	40.8	+ 8.4	72	17	17	21	30	2.13	- 1.19	0.94	4.5	7	Chas. Masenna.
Marengo.	Crawford.	363	29	39.5	+ 5.3	73	17	14	21	39	1.80	- 2.97	1.00	3.1	8	Dr. J. Cooperider.
Marion.	Grant.	814	25	33.9	+ 7.1	67	17	8	10	29	1.55	- 0.93	0.43	5.8	9	J. M. Johnson.
Mauzy.	Rush.	950	31	35.4	+ 7.7	69	17	5	21	32	1.27	- 2.30	0.44	2.7	11	James F. Hood.
Monticello.	White.	674	1								2.61		0.48	8.6	8	Elwood Kirkwood.
Moores Hill.	Dearborn.	980	10	37.2		70	17	10	21	32	2.01		0.80	4.7	8	J. E. Loughey.
Mount Vernon.	Posey.	410	25	40.3	+ 6.5	75	16	18	21	41	2.15	- 0.94	1.00	0.5	6	W. S. Bigney.
Paoli.	Orange.	611	14	40.2	+ 9.8	73	17	10	21	36	2.05	- 1.33	0.90	4.0	9	Silas G. Howard.
Princeton.	Gibson.	481	29	41.0	+ 8.7	73	17	16	21	36	2.75	- 0.69	1.35	4.5	5	James A. Gillum.
Richmond.	Wayne.	972	26	35.4	+ 7.1	68	17	4	21	31	1.34	- 1.29	0.33	2.6	10	Albert Mills.
Rochester.	Fulton.	775	6	33.1		59	17	9	10	24	2.10		0.65	7.0	7	Walter Vossler.
Rockville.	Parke.	722	25	34.4	+ 5.6	66	1	12	10	34	1.07	- 1.42	0.44	1.0	5	G. P. Keith.
Rome.	Perry.	370	8	43.2		76	15	19	21†	36	3.00		1.10	T.	10	Dr. W. N. Wirt.
Salamonia.	Jay.	6	32.8 ^a			59	14	10	21	28 ^a	1.12		0.35	1.5	6	Adam Anspach.
Salem.	Washington.	717	18	39.4	+ 8.0	72	17	13	21	39	2.43	- 1.25	0.85	T.	6	Chas. V. Skinner.
Scottsburg.	Scott.	570	17	41.0	+ 9.1	72	17	18	21†	29	2.50	- 0.63	0.91	2.5	8	Emmet S. Allen.
Seymour.	Jackson.	610	24	40.0	+ 8.5	74	17	8	21	36	2.67	- 0.96	1.15	4.2	8	Frank H. Park.
Shelbyville.	Shelby.	768	7	37.0		70	17	10	21	33	1.14		0.40	1.5	8	J. Robt. Blair.
Shoals.	Martin.	523	4								2.15		0.80	2.2	9	Edgar G. Hodgson.
Terre Haute.	Vigo.	498	21	39.3	+ 8.7	72	17	15	21	35	2.36	- 0.23	0.68	4.0	9	Oliver H. Greist.
Veedersburg.	Fountain.	612	12	36.6	+ 10.2	73	17	11	10	37	1.86	- 0.40	0.58	4.0	9	Prof. R. G. Gillum.
Vevay.	Switzerland.	525	30	41.0	+ 7.3	72	17	18	21†	30	2.25	- 2.83	0.40	5.0	7	L. A. Culver, jr.
Vincennes.	Knox.	431	19	37.4	+ 7.8	72	17	13	21	38	2.35	- 0.66	0.80	2.0	5	Miss Frederica Boerner.
Washington.	Daviss.	484	15	36.6	+ 6.0	70	17	9	21	41	1.92	- 1.14	0.46	3.0	6	Garrett V. List.
Whitestown.	Boone.	529	3	34.2		67	17	11	10	33	1.54		0.50	4.5	7	John T. Harris.
Winona Lake.	Kosciusko.	865	4	29.8		58	17	9	21†	32	1.42		0.43	8.5	8	Clyde O. Laughner.
Worthington.	Greene.	526	29	38.0	+ 6.9	71	17	10	21	33	2.32	- 1.29	0.65	6.0	9	Rev. Albert A. Young.
<i>Illinois.</i>																D. W. Solliday.
Albion.	Edwards.	531	20								2.09	- 0.86	0.46	5.8	10	B. F. Michels.
Charleston.	Coles.	720	26	36.4	+ 6.9	72	17	13	10†	37	1.62	- 1.57	0.53	2.1	8	Jacob B. Daisy.
Danville.	Vermilion.	604	9	36.4		71	17	12	10	35	1.67		0.55	4.6	10	A. T. Lemon.
Equality.	Gallatin.	421	13	42.2	+ 8.1	76	16	17	21	40	2.23	- 0.99	1.00	2.0	8	Dr. L. W. Gordon.
Fairfield.	Wayne.	495	18	39.9	+ 7.5	74	17	16	21†	38	2.19	- 0.16	1.18	1.5	4	Geo. A. Tromly.
Flora.	Clay.	495	25	39.2	+ 8.3	74	17	11	21	40	2.20	- 0.57	0.82	4.5	7	Jos. S. Peak.
Golconda.	Pope.	500	33	42.3	+ 6.1	78	16	16	22	39	2.62	- 1.29	1.19	T.	7	Dr. D. Lawrence.
Hooperston.	Vermilion.	715	8	34.0		63	17	8	10	30	1.97		0.46	9.7	11	S. F. Hoskinson.
McLeansboro.	Hamilton.	462	28	40.2	+ 6.5	77	17	15	21	41	2.72	- 0.68	1.80	0.2	5	R. C. Robinson.
Martinsville.	Clark.	630	23	37.8 ^a	+ 7.7	73	17	10	21	35 ^a	2.35	0.00	1.16	5.0	5	G. M. Daugherty.
Mount Carmel.	Wabash.	424	9	38.2		73	17	12	21	37	3.02		1.10	4.0	8	Mrs. H. M. Phillips.
New Burnside.	Johnson.	556	16	41.0	+ 7.1	76	16	14	22	37	1.84	- 1.07	0.85	0.4	9	Geo. Harris.
Olney.	Richland.	486	24	39.2	+ 6.7	74	17	13	21	35	2.41	- 0.50	1.34	10.4	8	Victor E. Phillips.
Palestine.	Crawford.	500	29	38.4	+ 7.6	72	17	12	23	35 ^a	2.56	- 0.67	0.80	5.5	9	Duane Shaw.
Paris.	Edgar.	600	18	34.6	+ 7.0	72	17	13	10	32	2.16	- 0.28	0.88	4.1	6	H. P. Twyman.
Philo.	Champaign.	700	27	34.2	+ 7.5	71	17	8	21	32	1.76	- 0.61	0.42	4.8	9	H. A. Burr.
Rantoul.	do.	768	20	35.4 ^b	+ 10.4	64	1†	8	10	34 ^a	1.56	- 0.49	0.49	8	Wm. Breiner.	
Robinson.	Crawford.	500	11	39.3	+ 8.2	72	17	13	21	39	2.24	- 0.81	0.53	5.0	6	A. P. Woodworth.
Summer [§] .	Lawrence.	459	5	39.2		71	17	14	21	35	2.31		0.60	10.0	7	O. A. Fyffe.
Tuscola.	Douglas.	644	18	34.8	+ 8.6	71	17	10	21</							

TABLE 2.—*Daily precipitation for February, 1911. District No. 3, Ohio Valley.*

Stations.	River basins.	Day of month.																												Total.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
New York.																															
Allegany.	Allegany.	.01	T.	.42	.01	.08	.06	.20	.35	.01	.52	.01	.05	.02	T.	.36	.25														3.61
Bolivar.	do.			.56	T.	.15	.30	.24	.05	.10		.70	.23	.25	.20	.37	.41	.05		.07									3.68		
Franklinville.	do.																														
Olean .	do.	.01																													3.35
Pennsylvania.																															
Aleppo.	Ohio.																														1.65
Baldwin.	Allegheny.																														3.09
Beaver Dam .	Ohio.	.07																													2.44
Bradford.	Allegheny.	.02																													3.05
Brookville.	do.																														2.92
California.	Monongahela																														
Clarion .	Allegheny.	T.		.50																											3.01
Claysville.	Ohio.			.32																											2.09
Confluence .	Youghiogheny	.08																													2.38
Davis Island Dam .	Ohio.	.04	T.	.33	.02	.40	.07	.03	T.	T.	T.																		1.94		
Derry Station.	Allegheny.																														2.13
Franklin .	do.	.01	.02	.64																											2.95
Freeport .	do.	.05		.41	.03																										2.45
Greensboro .	Monongahela	.14		.64																											2.91
Greensburg.	Youghiogheny																														2.17
Greenville.	Ohio.	T.	T.	.45	T.																										2.34
Grove City.	do.	T.	T.	.63	T.																										3.04
Herr's Island Dam .	Allegheny.	.09	T.	.31	.03	.34	.05	.03	T.	.01	T.																		1.94		
Indiana.	do.			.53																											2.51
Irwin.	Monongahela	T.																													1.98
Johnstown.	Allegheny.	T.		.29	.01	.63		.06	.05	.03	T.	T.																	2.92		
Lock No. 4 .	Monongahela	.10		.31		.35	.05	.02			T.	T.																	1.78		
Lycipps.	Allegheny.			.58																											2.34
Parkers Landing .	do.			.56		.40	.20	T.	.02	.04																				3.42	
Pittsburg.	Ohio.			.10		.17	T.	.46	.01	T.	T.																			1.98	
Saegerstown.	Allegheny.			.44		.42	.05	.10		.06																				3.04	
Saltsburg .	do.	.06	T.	.36	T.																										2.86
Skidmore.	Ohio.																														
Somerset.	Youghiogheny			.63		.80																									3.48
Springdale .	Allegheny.	.06		.35		.40	.04	.02	.08																					2.34	
Uniontown.	Monongahela			.52	T.	.36	.04	.27																						2.77	
Warren.	Allegheny.			.50		.30	T.																							3.76	
West Newton .	Youghiogheny	.20		.44	.01	.70	.24	.04	.00	.01	.01																		2.78		
Maryland.																															
Deer Park.	Youghiogheny			.35		.30																									1.75
Grantsville.	do.					.49																									1.40
Oakland.	do.					T.	.30																								1.75
West Virginia.																															
Baneroff .	Great Kanawha.	.47		.67		.27	.03	.15	.08																					3.11	
Beckley ^l .	do.	.58		.34																											1.56
Bens Run.	do.			.60		.45																									2.52
Bluefield.	Great Kanawha.	.21																													3.78
Brandoville .	Monongahela	.30		.50	.45																									1.98	
Buckhamon.	do.			.26		.15																								0.86	
Cairo.	Little Kanawha.					.20		.05																						2.24	
Central Station.	Middle Island Creek.	.02	T.	.18		.09	T.	.02		T.	T.																			1.22	
Charleston .	Great Kanawha.	.33		.52		.18		.16	.10																				2.51		
Creston .	Little Kanawha.	.13		.57		.17	.05	.10																					2.00		
Cuba.	Sand Creek.	.30		.70		.40		.09	T.																					2.12	
Davis .	Monongahela	.15		.60		.33	.05	.05	.03																				2.42		
Elizabeth .	Little Kanawha.	.15		.60		.33	.05	.05	.03																				2.30		
Elkhorn.	Big Sandy.	.38				.51	.46	.15																					2.18		
Elkins.	Monongahela	.01	.06	.15		.09		.30	T.	.01	T.	T.																1.91			
Fairmont .	do.	.12		.46	T.	.10	.13	T.	.12	.01	T.																1.83				
Glenville .	Little Kanawha.	.15		.30		.15	T.	T.	T.																				2.58		
Grafton.	Monongahela	.61				.12		.32		.05																			1.86		
Green Sulphur Springs.	Great Kanawha.	.15		.10		.38	.48	.18			T.	T.																2.52			
Hinton .	do.	.48		.14		.02	.04	.26	.40	.24	T.																	3.92			
Huntington .	Ohio.	.32		.13		.38		.14	.02			T.																2.05			
Lewisburg.	Great Kanawha.	.41				.16		.10	.46	.41																		3.11			
Logan.	Guyandotte.	.20	T.	.T.	.96			.12	.28																			1.09			
Lost Creek.	Monongahela.			.22				.03	T.	T.	</td																				

TABLE 2.—*Daily precipitation for February, 1911. District No. 3—Continued.*

Stations.	River basins.	Day of month.																												Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					
<i>Ohio—Continued.</i>																																		
Cadiz	Ohio	T.	T.	.30	T.	.08		.20		.01		T.	T.	.10			T.	.22	T.	.55	T.	.09					.01	T.	2.16					
Cambridge	Muskingum			.32		.33		.24																							1.49			
Camp Dennison	Ohio			.02	.01	T.	.48	.05																							1.53			
Canal Dover	Muskingum	.04		.53		.45		.12		.02																					2.04			
Canton	do			.16	.28	.75		.11		T.																					2.53			
Cardington	Scioto			.40	.23	.40		.10																							1.56			
Chillicothe	do			.02		.17		.55		.03																					1.72			
Cincinnati	Ohio			.02		.08		.40		.05																					1.80			
Circleville	Scioto	.12		.16		.33		.11		.20																					1.90			
Clarington	Ohio	.05	T.	.30		.32		.15		.25																					2.17			
Columbus	Scioto			.22		.15		.29		.04		T.	T.																	1.71				
Coshocton	Muskingum	.15	.03			.28				.60		.11																			2.13			
Dayton	Great Miami	.08		.25		.33		.11																							1.57			
Petroleum	Scioto	.07		.32		.31		.22		T.																					1.55			
Demos	Ohio	.03	T.	.30		.42		.22				T.	T.																		1.85			
Dennison	Muskingum			.44		.49		.04		.10																					2.06			
Frankfort	Scioto			T.		.60		T.																								1.50		
Garrettsville	Mahoning	.56		.39		.06		.05		.01		T.		.52					.06	.32		.23		.02		.04		.03		2.29				
Granville	Muskingum	.01	.29			.60		.05		T.		T.		.10																	1.73			
Gratiot	do	T.	.60	.40		.24																										2.01		
Green	Ohio	.40	.42	.47																													2.69	
Green Hill	Muskingum	.01	.49	T.	.81			T.	T.																							2.34		
Greenville	Great Miami	.30		.38		.07																										1.50		
Hillsboro	Scioto	.20	T.	.67		.12		T.																								2.64		
Ironton	Ohio	.14	.01	.90		.36		.14																							3.65			
Jacksonburg	Great Miami	.28		.49	T.																											1.55		
Kenton	Scioto	.69		.24																												1.26		
Killbuck	Muskingum	.40		.80		.02																										1.91		
Lancaster	Ohio	.10	.30	.12		.16		T.																								1.60		
McConnelsville	Muskingum	.06	.49	.44		.29		T.																								1.72		
Marietta	Ohio	.46		.42		.16		T.																								2.15		
Marion	Scioto	.38		.54																													2.09	
Milfordton	Muskingum	T.	T.	.35	.52	T.		T.																								1.63		
Milligan	do	.44		.37		.28		T.																								1.77		
Millport	Ohio	.52		.34	.18	.05																										2.18		
Nellie	Muskingum	.60		.70		T.																											1.65	
New Alexandria	Ohio	.13		.75		.45		.13																								1.90		
New Berlin	Muskingum																																2.89	
New Waterford	Ohio																																	
Ohio State University	Scioto	.05	.24			.26		.08		T.																							1.36	
Pataskala	Muskingum	.12		.39		.10		T.																								1.47		
Peebles	do	.13		.43		.06																										2.43		
Philo (1)	Muskingum	.33		.15		.23																										1.13		
Piqua	Great Miami	.11		.31		.33		.05																								1.67		
Plattsburgh	do	T.	.60	.20																												1.44		
Portsmouth	Prospect	.23		.50		.01		.06																								3.14		
Rittman	Scioto			.49		.00																												
Shenandoah	Muskingum	.26		.62		.02																											2.32	
Sidney	Great Miami	.04	.35	.36																													1.41	
Somerset	Scioto	.14		.19	T.	.20	T.		T.																							1.43		
Springfield	Great Miami	.10		.26		.42		.07		T.																						1.58		
Stimmonsfield	Ohio	.15		T.	.35	.55		.05		T.																						1.71		
Syracuse	do	.12		.11	T.	.35	.43		.20	T.																					2.09			
Thurman	Tennessee			.23		.23																										1.35		
Urbana	Great Miami			.53																													1.40	
Warren	Mahoning	T.	T.	.44	T.	.54	.04	.12		T.		T.		.38																	2.80			
Waverly	Scioto	.07		.35																													1.52	
Waynesville	Great Miami	.27		.38																													1.04	
Wooster	Muskingum	T.	.47			.50																										2.25		
Youngstown	Mahoning	.10		.20	.10	.60		.30																								3.76		
Zanesville	Muskingum	.06		.30	T.	.25	.05	.30		T.																					1.64			
<i>Virginia.</i>																																		
Big Stone Gap	Tennessee	.08		.70		.38	*	.20	.25	T.																					4.69			
Blacksburg	Kanawha	T.	.07			.65	.51	</																										

TABLE 2.—*Daily precipitation for February, 1911. District No. 3—Continued.*

Stations.	River basins.	Day of month.																												Total.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
<i>Tennessee.</i>																															
Ashwood.....	Tennessee.....	.15	.40	.75	.45	1.00	.16	.35	.12																						T. 3.88
Benton.....	do.....	.25	.70	T. 2.43	.61	.40	.05	.02	.03																					T. 5.17	
Birds Bridge	do.....	.93	.01	.50	.80	.36	.18																							T. 3.01	
Bluff City	do.....	.52	.16	.70	.94	.34	.18																							T. 3.20	
Byrdstown.....	Cumberland.....	.40	.75	.52	.1.10	.15	.10																							T. 3.42	
Carthage	do.....	1.18	.48	T. 1.80	.38			.18	.02	T.																			T. 4.52		
Cedar Hill.....	do.....	.15	T. 1.50	T. 1.40				.10	.30	T.																			T. 3.65		
Celina	do.....	1.55	.85	.81	.26	.07	T.																							T. 4.55	
Center Point	Tennessee.....	.75	.85	.27	.58	.25	.28																							T. 3.63	
Charleston	do.....	.14	.12	.05	.50	1.30	1.05	.10	.10	.04	.02																		T. 4.17		
Chattanooga.....	do.....	.26	.05	.67	.08	1.30	.47	.57	.01	.09	.02	.01																	T. 4.41		
Clarksville.....	Cumberland.....	.38	.20	.47	.01	.21		.09	.09																				T. 2.72		
Clinton	Tennessee.....	.90	.15	2.01	1.65	1.15	.15	.23	T.	T.	.10																		T. 5.38		
Dandridge	do.....	.80	.10	3.01	1.20	1.02	.20																						T. 3.92		
Decatur.....	do.....	.01	T. 1.00	.01	.49	.08	1.33	.40	.19	.06	.01	.06																T. 4.24			
Dickson.....	Cumberland.....	.12	.46	.63	.46	1.06	T.	.23		.07	.12																		T. 3.79		
Dover.....	do.....	1.24	.39	T. 2.24	T.																								T. 3.55		
Dunlap.....	Tennessee.....	.65	.83	2.01	1.45	.38		.17		.05																			T. 4.25		
Elizabethhton	do.....	.52	.16	2.01	1.39	.40	.60																						T. 4.07		
Erasmus.....	Cumberland.....	.05	1.39	.62	.44	1.12	.21	.12	T.	.14																			T. 4.64		
Florence.....	do.....	.24	.56	.61	.06	2.40	.28	.22		.10																			T. 5.91		
Franklin	do.....	1.91	.70	.1.31	.38			.24		.10																			T. 5.67		
Hall's Hill	do.....	.78	.72	.1.75	.30			.30		.10																			T. 4.37		
Harriman.....	Tennessee.....	1.15	.62	1.90				.18		.22																			T. 4.62		
Hohenwald.....	do.....	.21	.55	.91	.64	1.20	.20	.43		.17																			T. 5.11		
Iron City.....	do.....	.07	.35	1.56	T. 1.86	.32	.54	.02	.24	T.																		T. 5.69			
Jefferson City.....	do.....	.75	.53	.2.15	.35	.16		.03																					T. 4.31		
Johnson City	do.....	.56	.01	1.69	.65	.35	.14		.04	T.																			T. 3.14		
Johnsonsonville.....	do.....	.35	.15	.46	.11	.53		.18	.08	.10																			T. 2.76		
Kingston	do.....	.76	.36	1.81	1.00	.62	.06	.20	T.	.11																		T. 4.13			
Knoxville.....	do.....	T. 85	1.15	.53	.23	1.03	.30	.19	.02	T.	.02																	T. 4.83			
Lebanon.....	Cumberland.....	1.23	.41	2.01	1.85	.14	.15		.07																			T. 4.59			
Lewisburg.....	Tennessee.....	1.13	.95	T. 1.04	2.21	1.41	.22	.28		.14	T.	T.	.90															T. 5.45			
Livingston.....	Cumberland.....	.64	.43	.37	.14	.34	.08																						T. 3.53		
Loudon	Tennessee.....	T. 1.13	.15	.29	1.14	.81	.11	.13	T.	T.																		T. 4.18			
Lynville.....	do.....	.31	.71	T. 1.10	3.22	0.5	.20	T.	.35	.10	.12																	T. 6.09			
McGhee	do.....	.10	.56	.1.20	.67																								T. 4.35		
McMinnville.....	Cumberland.....	T. 0.08	.47	.73	.07	.29	.23	.19	T.	T.	.11																	T. 3.60			
Maryville.....	Tennessee.....	1.13	.57	.1.85	.54	.10		.02	T.																			T. 4.24			
Mountain City.....	do.....	.43	.15	.1.21	.54	T.																							T. 2.64		
Nashville.....	Cumberland.....	1.60	T.	.44	.37	.90	.07	.14		.04	.06	T.																T. 4.68			
Newport	Tennessee.....	.96	.31	3.51	1.10	.32																							T. 3.69		
New River	Cumberland.....	.84	.56	.1.20	.67																								T. 3.99		
Palmetto.....	do.....	.23	.69	.92	2.01	1.25	.20	.31		.07																		T. 4.31			
Pinewood.....	do.....	.28	.98	.46	.25	1.08	.05	.28		.18	.25																	T. 4.50			
Pope.....	do.....	.15	.23	.90		.1.04	T.	.35		.21	T.																	T. 3.64			
Rogersville	do.....	.01	.76	.06	3.51	1.41	.74	.11	T.	T.	.02																T. 3.66				
Rugby.....	Cumberland.....	.45	.60	.60	1.11	1.48	.18	.35																				T. 4.35			
Savannah.....	Tennessee.....	1.00	.80	1.00																									T. 4.63		
Sevierville.....	do.....	1.00	.41	.41	.1.82	.49	.07	.13		.02																		T. 4.22			
Sewanee.....	do.....	.47	.99	.1.30																									T. 4.26		
Sparta.....	Cumberland.....	.50	.73	T. 1.83	.10																								T. 3.26		
Springdale.....	Tennessee.....	.11	.20	.1.20	.50																								T. 3.01		
Springville.....	do.....	.19	.76	.37	T. 2.27		.11		.07	.20																		T. 3.02			
Tazewell	do.....	.79	.47	.16	.10	.59	T.	.10																					T. 3.77		
Tullahoma.....	do.....	.19	.45	.91	.54	1.77	.31	.39	.01	.06																		T. 5.06			
Walling	Cumberland.....	1.01	.20	.04	2.20	.75		.10		.04																		T. 5.69			
Waynesboro.....	Tennessee.....	.12	.66	.86	.33	1.47	.20	.33		.07	.32																	T. 5.22			
Wildersville.....	do.....	.55	.50	.15	.82																								T. 3.84		
Worsham	Cumberland.....	.42	.82	.42	.46																								T. 2.85		
Yukon.....	Tennessee.....	.46	.1.26	.32	1.45																								T. 4.56		
Alpha.....	Cumberland.....	1.53</																													

TABLE 2.—*Daily precipitation for February, 1911. District No. 3—Continued.*

TABLE 3.—*Maximum and minimum temperatures at selected stations, February, 1911. District No. 3, Ohio Valley.*

Date.	Pennsylvania.				West Virginia.												Ohio.											
	Greenville.		Pittsburg.		Charleston.		Elkhorn.		Elkins.		Glenville. §§		Huntington. §§		Morgan- town.		Parkers- burg.		Wheel- ing. §§		Canton.		Cincin- nati.		Colum- bus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	44	19	44	27	70	35	67	32	57	32	60	29	64	28	52	25	55	33	58	23	48	22	64	37	47	26	49	25
2....	50	23	58	25	69	44	60	45	60	32	64	39	61	35	62	36	52	24	57	29	64	34	58	31	59	33		
3....	44	18	48	23	65	34	62	32	55	24	56	37	52	34	57	22	54	30	50	20	42	24	47	32	43	28	43	30
4....	37	32	48	34	60	42	53	40	46	33	53	39	45	34	44	36	49	33	41	32	40	32	44	31	43	29	40	32
5....	33	18	34	21	45	29	51	22	39	27	41	26	41	28	36	23	36	27	34	25	35	23	36	28	30	23	35	25
6....	30	18	39	23	62	30	55	25	46	31	56	31	62	30	48	25	57	29	47	20	39	23	55	31	43	25	44	26
7....	34	20	36	26	62	38	57	33	44	31	54	34	48	35	42	33	39	32	34	31	36	22	43	28	34	23	34	22
8....	34	26	38	28	52	40	55	41	49	31	51	38	47	35	42	29	40	34	38	32	43	28	44	29	36	28	36	
9....	39	21	40	26	44	35	61	35	35	30	40	33	46	33	40	30	44	30	46	29	43	24	46	28	43	25	46	22
10....	31	21	31	22	47	27	38	24	33	15	38	25	37	25	39	21	34	22	28	24	30	21	34	19	28	20	33	17
11....	39	5	41	20	45	24	45	21	42	13	43	16	44	21	42	18	40	19	45	17	43	17	45	24	41	23	43	20
12....	40	18	40	31	45	38	45	30	37	33	42	32	43	25	42	34	42	36	43	17	39	29	40	32	42	36	40	32
13....	38	33	44	35	63	30	61	29	62	26	61	33	58	31	55	35	53	38	51	19	43	36	53	42	49	37	46	36
14....	44	35	63	41	75	45	63	40	66	38	72	43	72	35	67	42	72	45	68	33	61	39	66	51	64	45	65	45
15....	45	32	52	40	75	46	63	41	57	38	70	45	61	43	64	47	52	39	49	44	49	42	57	43	49	42	56	41
16....	49	30	53	34	72	36	65	35	61	29	63	32	66	33	56	33	55	32	58	35	64	40	56	35	59	32	59	32
17....	61	37	64	41	72	41	64	43	64	41	69	44	71	34	62	48	67	53	64	34	63	47	70	57	67	48	70	54
18....	50	29	51	32	72	43	62	45	60	32	68	39	58	55	62	33	62	36	40	38	47	33	60	34	48	32	62	35
19....	31	25	34	29	43	34	51	37	33	28	49	30	33	32	34	26	36	30	36	27	36	26	36	33	22	36	28	
20....	27	20	33	21	40	26	44	22	37	18	34	25	27	27	34	24	32	22	31	25	30	22	29	24	19	29	16	
Mns.	40.1	23.0	42.9	27.7	55.1	33.8	53.4	31.0	46.1	27.6	51.3	31.1	49.4	30.6	47.1	29.8	46.9	31.4	45.8	27.2	43.6	27.8	47.9	31.9	42.4	28.3	45.3*	28.3*
Date.	Ohio.				Virginia.				Asheville, N. C.				Decatur, Ala.				Tennessee.								Beatty- ville, Ky. §§			
	Marion.		Waverly.		Big Stone Gap.		Wytheville.		Chatta- nooga.		Johnson City.		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynes- boro.							
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	43	18	59	32	68	43	64	37	69	43	75	38	65	49	72	43	70	47	69	50	67	51	78	40	75	49	73	29
2....	55	30	62	34	70	47	66	35	68	42	70	55	74	51	68	36	70	45	67	39	64	50	65	49	60	42		
3....	43	24	47	28	73	43	46	32	55	39	73	40	61	44	65	40	61	40	65	36	65	37	69	40	51	31		
4....	46	32	49	26	60	45	53	34	57	36	63	43	62	44	56	39	58	42	52	40	65	41	63	39	58	36	50	34
5....	33	20	52	31	49	34	47	32	55	35	63	40	55	39	48	33	51	38	57	36	58	34	62	35	58	36	48	25
6....	40	21	58	28	50	37	41	29	47	35	65	40	56	45	60	31	58	42	69	38	66	50	65	47	69	50	64	30
7....	36	18	43	30	60	32	60	34	66	35	60	48	56	47	65	44	65	45	60	31	66	34	69	34	57	32		
8....	33	26	53	31	53	45	51	40	53	48	48	48	61	52	55	49	57	49	60	39	41	60	45	61	40	48	34	
9....	42	15	50	29	52	40	47	34	48	35	57	42	53	42	50	28	49	41	51	36	54	38	50	51	36	52	33	
10....	32	19	41	22	42	26	37	26	38	27	46	33	46	33	43	26	43	31	44	28	44	25	45	26	45	23	44	
11....	43	14	39	18	40	27	42	24	40	27	42	32	42	33	46	29	40	31	38	34	43	30	49	34	44	20		
12....	39	27	43	21	44	33	42	31	49	31	49	35	47	34	44	29	47	36	47	38	47	36	59	38	48	37	44	25
13....	44	34	53	38	50	36	56	26	61	28	53	39	56	42	51	31	53	39	43	60	42	60	38	60	44	59	26	
14....	61	39	73	46	61	46	50	44	68	35	70	45	67	52	65	42	67	45	74	56	73	57	75	57	75	36		
15....	52	39	60	40	67	43	64	36	67	44	73	45	72	50	68	37	66	50	74	45	76	41	72	38	77	37	75	32
16....	58	32	61	28	67	35	43	35	49	37	70	46	59	48	62	41	63	47	72	51	49	71	47	73	53	74	30	
17....	65	50	72	46	61	39	53	35	67	40	70	50	60	48	55	45	57	49	70	54	67	52	67	51	69	56	73	36
18....	65	33	66	41	54	49	56	40	60	43	74	53	75	46	66	45	70	47	72	46	54	54	70	40	76	56	62	48
19....	34	22	41	29	52	39	40	30	55	37	72	53	69	49	60	40	61	48	47	33	59	43	66	46	56	48	55	32
20....	28	18	32	21	50	28	36	20	40	22	46	34	53	27	40	22	57	28	33	27	43	27	53	28	48	28	59	25
21....	23	11	34	18	29	23	23	16	28	18	47	28	37	25	29	18	34	24	31	20	37	24	32	23	36	21	31	21
22....	32	17	36	14	36	15	30	14	36	14	50	19	43	20	29	18	42	19	39	17	44	16	38	16	43	15	37	14
23....	38	13	41	18	45	26	42	22	47	21	55	20	52	26	45	24	46	27	48	24	45	20	44	19	43	20	47	

TABLE 3.—*Maximum and minimum temperatures at selected stations, February, 1911. District No. 3—Continued.*

Date.	Kentucky.												Indiana.												Philo, Ill.			
	Bowling Green. §§		Earling- ton. §§		Greens- burg. §§		Lexington.		Louisville.		Maysville. §§		Williams- burg. §§		Butler- ville.		Evans- ville.		Indian- apolis.		Kokomo.		Rockville.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.				
1....	74	30	75	34	76	29	67	42	71	42	71	29	62	32	67	36	71	41	63	37	54	28	66	39	69	39	64	35
2....	51	42	48	39	45	39	63	32	66	33	56	38	68	53	65	33	63	30	59	29	60	28	61	27	63	30	57	25
3....	57	29	55	28	56	25	53	31	53	30	55	33	65	29	45	30	46	29	40	30	38	23	40	28	42	23	40	25
4....	50	34	47	33	50	28	47	32	47	36	47	32	54	38	47	34	44	32	40	29	38	26	38	26	42	30	35	24
5....	60	32	51	31	57	30	38	28	43	31	46	27	58	30	40	24	43	32	33	27	31	22	33	26	36	26	31	24
6....	65	39	55	37	67	30	61	32	56	33	62	28	65	43	50	30	46	31	39	25	35	23	36	27	42	31	34	25
7....	56	31	52	30	55	29	50	28	49	31	48	31	63	28	42	26	47	30	37	25	31	22	36	26	42	26	33	22
8....	42	39	40	30	49	49	52	31	47	32	45	31	57	28	46	30	43	33	37	28	35	25	36	23	42	29	33	20
9....	52	32	51	30	52	32	46	27	49	30	50	30	51	38	40	23	48	30	30	20	33	26	28	21	44	21	34	18
10....	45	23	42	24	44	20	34	20	38	22	37	20	43	26	35	16	37	22	31	13	28	9	28	12	35	16	32	12
11....	38	26	44	25	43	21	42	27	42	30	44	20	43	25	40	21	41	32	45	24	44	16	35	26	44	22	45	24
12....	46	33	45	32	46	27	42	34	45	37	44	23	47	30	41	33	43	38	39	34	39	31	38	34	41	33	38	35
13....	61	36	63	38	60	34	54	40	59	43	56	37	60	29	50	39	59	42	50	39	43	35	52	38	55	41	57	37
14....	72	41	69	44	75	41	70	48	67	50	74	41	73	39	62	49	63	48	60	42	56	41	52	44	66	50	57	41
15....	74	38	79	35	72	34	64	39	66	38	63	48	73	30	65	44	71	40	54	40	46	36	49	38	62	35	56	37
16....	77	39	79	36	75	34	66	46	72	45	72	52	67	36	62	42	74	52	57	41	55	35	57	45	57	47	59	41
17....	74	51	75	56	70	35	68	53	72	57	72	43	70	41	70	54	71	57	69	44	64	34	57	41	71	55	71	41
18....	64	54	53	52	62	52	58	35	62	36	53	50	67	51	60	33	59	37	44	36	47	32	52	35	63	35	41	33
19....	36	33	35	32	36	32	35	30	36	28	35	31	43	38	35	28	37	28	36	24	37	27	36	26	37	29	34	24
20....	31	27	29	27	35	25	31	22	29	24	29	23	31	29	30	20	28	23	27	20	28	17	27	20	30	20	26	12
21....	31	19	23	19	30	16	24	17	28	20	30	20	27	23	30	10	28	19	24	16	24	7	30	15	28	10	22	8
22....	39	16	32	18	40	15	30	16	36	20	36	15	38	11	35	14	34	20	34	16	33	12	30	15	32	12	33	16
23....	48	21	45	19	45	15	37	21	43	26	43	19	49	17	40	15	41	24	41	23	40	18	30	19	38	14	40	14
24....	53	24	50	22	50	19	45	25	50	28	50	20	50	19	45	21	47	27	47	25	45	26	34	24	43	22	47	24
25....	57	24	57	25	65	18	53	28	55	33	58	22	55	21	50	27	54	34	52	29	52	26	45	27	50	24	52	23
26....	66	42	63	37	65	35	59	41	60	41	59	25	61	23	55	42	58	39	54	39	51	34	45	40	57	39	50	39
27....	60	34	54	46	57	31	50	35	49	35	54	32	60	25	50	29	47	36	41	29	41	28	41	26	51	30	39	25
28....	39	34	37	37	36	31	35	26	36	27	34	29	39	30	41	25	36	29	31	24	34	24	33	25	40	26	31	25
Mns.	54.2	33.0	51.7	32.7	54.0	29.5	49.1	31.6	50.9	33.5	50.8	30.3	55.0	30.5	47.8	29.1	49.2	33.4	43.7	28.9	41.5	25.4	40.5	28.3	47.0	29.1	42.5	26.0